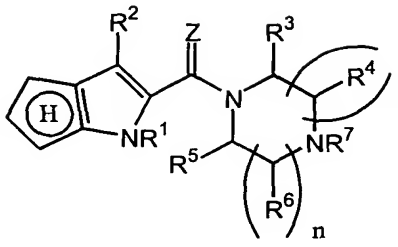
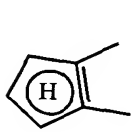
What is claimed is:

1. A compound of formula (I):



(I)

wherein



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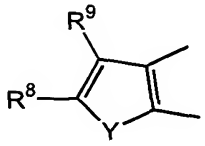

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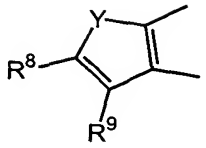


;

Y is O or S;

Z is O or S;

n is 1 or 2;

m is 1 or 2;

n + m is 2 or 3;

R^1 is H or C_{1-6}alkyl;

R^2 is H, F, Cl, Br or C_{1-6}alkyl;

R^3 and R^4 are, independently, H, C_{1-4}alkyl, C_{3-6}cycloalkyl, C_{1-4}alkyl(C_{3-6}cycloalkyl), cyano, $-CF_3$, $-(CO)NR^pR^q$, $-(CO)OR^r$, $-CH_2NR^pR^q$ or $-CH_2OR^r$; where R^p, R^q and R^r are independently selected from H, C_{1-4}alkyl, C_{3-6}cycloalkyl, phenyl, $-C_{1-2}$alkyl(C_{3-6}cycloalkyl), benzyl or phenethyl, or R^p and R^q taken together with the nitrogen to which they are attached, form a 4-7 membered heterocyclic ring with 0 or 1 additional heteroatoms selected from O, S, NH or NC_{1-6}alkyl, and where any phenyl or alkyl or cycloalkyl moiety of the foregoing is optionally and independently substituted with between 1 and 3 substituents selected from C_{1-3}alkyl, halo, hydroxy, amino, and C_{1-3}alkoxy;

R^5 and R^6 are, independently, H or C_{1-6}alkyl;

R^7 is $-R^a$, $-R^bR^a$, $-R^e$-O-R^a or $-R^e$-N(R^c)(R^d), where R^a is H, cyano, -(C=O)N(R^c)(R^d), -C(=NH)(NH_2), C_{1-10}alkyl, C_{2-8}alkenyl, C_{3-8}cycloalkyl, C_{4-7}heterocyclic radical or phenyl, where the C_{4-7}heterocyclic radical is attached at a carbon atom and contains one of O, S, NH or NC_{1-4}alkyl, and optionally an additional NH or NC_{1-6}alkyl in rings of 5 or 6 or 7 members, where R^b is C_{1-8}alkylene or C_{2-8}alkenylene, where R^e is C_{2-8}alkylene or C_{2-8}alkenylene, where R^c and R^d are each independently H, C_{1-4}alkyl, C_{2-4}alkenyl, C_{3-6}cycloalkyl or phenyl, or R^c and R^d taken together with the nitrogen to which they are attached, form a 4-7 membered heterocyclic ring with 0 or 1 additional heteroatoms selected from O, S, NH or NC_{1-6}alkyl, and where any phenyl or alkyl or cycloalkyl moiety of the foregoing is optionally and independently substituted with between 1 and 3 substituents selected from C_{1-3}alkyl, halo, hydroxy, amino, and C_{1-3}alkoxy;

alternatively, R^7 may be taken together with an adjacent R^4 as well as their carbon and nitrogen of attachment to form a 5, 6 or 7 membered heterocyclic ring, with 0 or 1 additional heteroatoms selected from O, S, NH or NC_{1-6}alkyl, and optionally and independently substituted with between 1 and 3 substituents selected from C_{1-3}alkyl, halo, hydroxy, amino, and C_{1-3}alkoxy;

R^8 and R^9 are, independently, H, F, Cl, Br, I, C_{1-4}alkyl, C_{1-4}alkoxy, -C_{3-6}cycloalkyl, -OC_{3-6}cycloalkyl, -OCH_2Ph, -CF_3, -OCF_3, -SCF_3, -(C=O)R^k (wherein R^k is H, C_{1-4}alkyl, -OH, phenyl, benzyl, phenethyl or C_{1-6}alkoxy), -(N-R^t)(C=O)R^k (where R^t is H or C_{1-4}alkyl), -(N-R^t)SO_2C_{1-4}alkyl, -(S=$(O)_p$)-C_{1-4}alkyl (wherein p is 0, 1 or 2), nitro, -$SO_2NR^lR^m$ (wherein R^l and R^m are independently selected from H, C_{1-4}alkyl, phenyl, benzyl or phenethyl, or R^l and R^m taken together with the nitrogen to which they are attached, form a 4-7 membered heterocyclic ring with 0 or 1 additional heteroatoms selected from O, S, NH or NC_{1-4}alkyl), -(C=O)NR^lR^m, cyano or phenyl, where any phenyl or alkyl or cycloalkyl moiety of the foregoing is optionally and independently substituted with between 1 and 3 substituents selected from C_{1-3}alkyl, halo, hydroxy, amino, and C_{1-3}alkoxy;

and enantiomers, diastereomers and pharmaceutically acceptable salts and esters thereof,

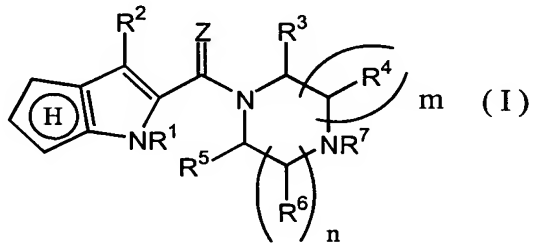
with the following provisos,

that R^6 adjacent to N must be H where R^4 adjacent to N is other than H,

that R^7 is not $-CH_2CH_2OH$; and

that where the core molecule is a 4*H*-furo, then one of R^4 and R^6 adjacent to N must not be methyl when the other is hydrogen unless R^6 and R^4 are taken together to form a bridging moiety.

2 A pharmaceutical composition containing a compound of formula (I):



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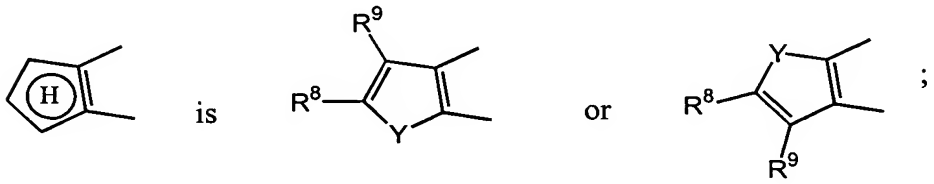


;

Y is O or S;

Z is O or S;

n is 1 or 2;

m is 1 or 2;

n + m is 2 or 3;

R^1 is H or C_{1-6}alkyl;

R^2 is H, F, Cl, Br or C_{1-6}alkyl;

R^3 and R^4 are, independently, H, C_{1-4}alkyl, C_{3-6}cycloalkyl, C_{1-4}alkyl(C_{3-6}cycloalkyl), cyano, $-CF_3$, $-(CO)NR^pR^q$, $-(CO)OR^r$, $-CH_2NR^pR^q$ or $-CH_2OR^r$; where R^p, R^q and R^r are independently selected from H, C_{1-4}alkyl, C_{3-6}cycloalkyl, phenyl, $-C_{1-2}$alkyl(C_{3-6}cycloalkyl), benzyl or phenethyl, or R^p and R^q taken together with the nitrogen to which they are

attached, form a 4-7 membered heterocyclic ring with 0 or 1 additional heteroatoms selected from O, S, NH or NC_{1-6}alkyl, and where any phenyl or alkyl or cycloalkyl moiety of the foregoing is optionally and independently substituted with between 1 and 3 substituents selected from C_{1-3}alkyl, halo, hydroxy, amino, and C_{1-3}alkoxy;

R^5 and R^6 are, independently, H or C_{1-6}alkyl;

R^7 is $-R^a$, $-R^bR^a$, $-R^e$-O-R^a or $-R^e$-$N(R^c)(R^d)$, where R^a is H, cyano, $-(C=O)N(R^c)(R^d)$, $-C(=NH)(NH_2)$, C_{1-10}alkyl, C_{2-8}alkenyl, C_{3-8}cycloalkyl, C_{4-7}heterocyclic radical or phenyl, where the C_{4-7}heterocyclic radical is attached at a carbon atom and contains one of O, S, NH or NC_{1-4}alkyl, and optionally an additional NH or NC_{1-6}alkyl in rings of 5 or 6 or 7 members, where R^b is C_{1-8}alkylene or C_{2-8}alkenylene, where R^e is C_{2-8}alkylene or C_{2-8}alkenylene, where R^c and R^d are each independently H, C_{1-4}alkyl, C_{2-4}alkenyl, C_{3-6}cycloalkyl or phenyl, or R^c and R^d taken together with the nitrogen to which they are attached, form a 4-7 membered heterocyclic ring with 0 or 1 additional heteroatoms selected from O, S, NH or NC_{1-6}alkyl, and where any phenyl or alkyl or cycloalkyl moiety of the foregoing is optionally and independently substituted with between 1 and 3 substituents selected from C_{1-3}alkyl, halo, hydroxy, amino, and C_{1-3}alkoxy;

alternatively, R^7 may be taken together with an adjacent R^4 as well as their carbon and nitrogen of attachment to form a 5, 6 or 7 membered heterocyclic ring, with 0 or 1 additional heteroatoms selected from O, S, NH or NC_{1-6}alkyl, and optionally and independently substituted with between 1 and 3 substituents selected from C_{1-3}alkyl, halo, hydroxy, amino, and C_{1-3}alkoxy;

R^8 and R^9 are, independently, H, F, Cl, Br, I, C_{1-4}alkyl, C_{1-4}alkoxy, $-C_{3-6}$cycloalkyl, $-OC_{3-6}$cycloalkyl, $-OCH_2Ph$, $-CF_3$, $-OCF_3$, $-SCF_3$, $-(C=O)R^k$ (wherein R^k is H, C_{1-4}alkyl, -OH, phenyl, benzyl, phenethyl or C_{1-6}alkoxy), $-(N\text{-}R^t)(C=O)R^k$ (where R^t is H or C_{1-4}alkyl), $-(N\text{-}R^t)SO_2C_{1-4}$alkyl, $-(S=(O)_p)$-C_{1-4}alkyl (wherein p is 0, 1 or 2), nitro, $-SO_2NR^lR^m$ (wherein R^l and R^m are independently selected from H, C_{1-4}alkyl, phenyl, benzyl or phenethyl, or R^l and R^m taken together with the nitrogen to which they are

attached, form a 4-7 membered heterocyclic ring with 0 or 1 additional heteroatoms selected from O, S, NH or NC_{1-4}alkyl), -(C=O)NR^lR^m, cyano or phenyl, where any phenyl or alkyl or cycloalkyl moiety of the foregoing is optionally and independently substituted with between 1 and 3 substituents selected from C_{1-3}alkyl, halo, hydroxy, amino, and C_{1-3}alkoxy;

and enantiomers, diastereomers and pharmaceutically acceptable salts and esters thereof,

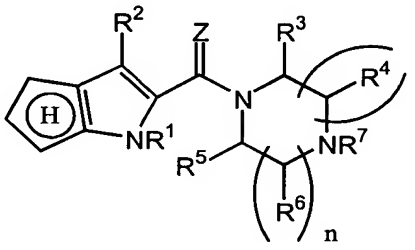
with the following provisos,

that R^6 adjacent to N must be H where R^4 adjacent to N is other than H,

that R^7 is not $-CH_2CH_2OH$; and

that where the core molecule is a 4*H*-furo, then one of R^4 and R^6 adjacent to N must not be methyl when the other is hydrogen unless R^6 and R^4 are taken together to form a bridging moiety.

3 A method for the treatment or prevention of H_4-mediated diseases and conditions comprising the step of administering to a patient in need of such treatment or prevention a pharmaceutical composition containing an effective amount of a compound of formula (I):



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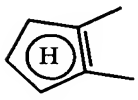

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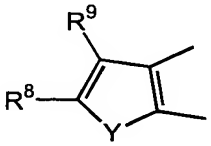

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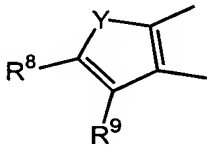

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R^1 is H or C_{1-6}alkyl;

R^2 is H, F, Cl, Br or C_{1-6}alkyl;

R^3 and R^4 are, independently, H, C_{1-4}alkyl, C_{3-6}cycloalkyl, C_{1-4}alkyl(C_{3-6}cycloalkyl), cyano, $-CF_3$, $-(CO)NR^pR^q$, $-(CO)OR^r$, $-CH_2NR^pR^q$ or $-CH_2OR^r$; where R^p, R^q and R^r are independently selected from H, C_{1-4}alkyl, C_{3-6}cycloalkyl, phenyl, $-C_{1-2}$alkyl(C_{3-6}cycloalkyl), benzyl or phenethyl, or R^p and R^q taken together with the nitrogen to which they are attached, form a 4-7 membered heterocyclic ring with 0 or 1 additional heteroatoms selected from O, S, NH or NC_{1-6}alkyl, and where any phenyl or alkyl or cycloalkyl moiety of the foregoing is optionally and independently substituted with between 1 and 3 substituents selected from C_{1-3}alkyl, halo, hydroxy, amino, and C_{1-3}alkoxy;

R^5 and R^6 are, independently, H or C_{1-6}alkyl;

R^7 is $-R^a$, $-R^bR^a$, $-R^e$-O-R^a or $-R^e$-N(R^c)(R^d), where R^a is H, cyano, $-(C=O)N(R^c)(R^d)$, $-C(=NH)(NH_2)$, C_{1-10}alkyl, C_{2-8}alkenyl, C_{3-8}cycloalkyl, C_{4-7}heterocyclic radical or phenyl, where the C_{4-7}heterocyclic radical is attached at a carbon atom and contains one of O, S, NH or NC_{1-4}alkyl, and optionally an additional NH or NC_{1-6}alkyl in rings of 5 or 6 or 7 members, where R^b is C_{1-8}alkylene or C_{2-8}alkenylene, where R^e is C_{2-8}alkylene or C_{2-8}alkenylene, where R^c and R^d are each independently H, C_{1-4}alkyl, C_{2-4}alkenyl, C_{3-6}cycloalkyl or phenyl, or R^c and R^d taken together with the nitrogen to which they are attached, form a 4-7 membered heterocyclic ring with 0 or 1 additional heteroatoms selected from O, S, NH or NC_{1-6}alkyl, and where any phenyl or alkyl or cycloalkyl moiety of the foregoing is optionally and independently substituted with between 1 and 3 substituents selected from C_{1-3}alkyl, halo, hydroxy, amino, and C_{1-3}alkoxy;

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